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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/936,624

02/05/2002

Ben A. Lear

M-16844 US

8735

32605

7590

09/30/2010

Haynes and Boone, LLP

IP Section

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EXAMINER

MAIS, MARK A

ART UNIT

PAPER NUMBER

2467

MAIL DATE

DELIVERY MODE

09/30/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/936,624	Applicant(s) LEAR ET AL.	
	Examiner MARK A. MAIS	Art Unit 2467	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 63 and 64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 63 and 64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 2, 2010 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Kenner et al. in view of Jorgensen

3. Claims 63-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner et al. (USP 6,502,125) in view of Jorgensen (USP 6,452,915).

4. With regard to claim 63, Kenner et al. discloses a system **[Fig. 1]** comprising:

a management center **[Fig. 1, Mirror Service Provider (MSP) 32]**;

a plurality of nodes **[Fig. 1, Content Providers 22, 24/Delivery Sites 26, 28, 30]**

configured to relay data from the management center to a client **[e.g., Fig. 1, User Terminal 12]**;
and

wherein the management center comprises a mapping engine that is configured to *map traceroutes between the management center* **[Fig. 1, MSP 32]**, *at least one of the nodes* **[Fig. 1, Content Providers 22,24/Delivery Sites 26, 28, and 30]**, *and the client* **[Fig. 1, Client 12]** *so as to determine a route from the management center to the client* **[Smart mirroring, col. 5, lines 20-25; includes traceroute, reverse traceroute, dynamic traceroute, and macroscopic network analysis, col. 9, line 61 to col. 11, line 18; e.g., Fig. 1, between MSP 32 and client 12 as well as between any specified pair of computers between MSP 32 and Client 12 (dynamic traceroute); MSP 32 provides management functions to distribution of Delivery Sites 26, 28, and 30 as well as allocation of requests to Content Providers 22, 24/Delivery Sites 26, 28, and 30, col. 7, lines 67; Delivery sites have the same content as Content Providers, col. 3, line 63 to col. 4, line 4; i.e., a broadcast stream is delivered from the Content Provider to the Delivery Site] *via a selected one of the nodes* **[Smart mirroring, col. 5, lines 20-25; includes traceroute, reverse traceroute, dynamic traceroute, and macroscopic network analysis, col. 9, line 61 to col. 11, line 18; e.g., Fig. 1, between MSP 32 and client 12 as well as between any specified pair of computers between MSP 32 and Client 12 (dynamic traceroute) such as between MSP 32 and Content Providers 22, 24/Delivery Sites 26, 28,****

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and 30; network performance is interpreted as mapping traceroutes between MSP 32 and Client 12 via Content Providers/Delivery Sites] ; and

wherein the management center is configured to downgrade lower priority clients from a higher quality of service network link to a less optimal network link when a higher priority client requests use of the higher quality of service link.

Kenner et al. does not disclose downgrading the network link for lower priority clients when higher priority clients request the link. However, prioritizing clients and downgrading service links for low priority clients is well known in the art. For example, Jorgensen (USP 6,452,915) discloses prioritizing higher priority clients over lower priority clients and scheduling low priority traffic from a subscriber who has purchased premium SLA service agreement over high priority traffic from a subscriber who has a low cost SLA service priority **[Fig. 9; col. 50, lines 15-46]**. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the MSP 32 of Kenner et al. to include client prioritization for optimal network links in order to allocate available bandwidth based on subscriber priorities **[Jorgensen, col. 50, lines 30-34]**.

5. With regard to claim 64, Kenner et al. discloses a method **[Fig. 1]** comprising:

receiving a request for data from a client, the request being received by a management center **[client requests delivery site file from MSP 32 (via configuration utility), col. 5, lines 50-56; traceroute information is stored in MSP 32 and continuous test data is correlated to information in the database, col. 11, lines 28-35];**

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directing the client to a node that is selected as being best situated to relay the data from a content provider to the client *map by using a mapping engine to map traceroutes between the management center, the node, and the client*, the client being directed to the node by the management center [MSP 32 provides management functions to distribution of Delivery Sites 26, 28, and 30 as well as allocation of requests to Content Providers 22, 24/Delivery Sites 26, 28, and 30, col. 7, lines 67; Delivery sites have the same content as Content Providers, col. 3, line 63 to col. 4, line 4; i.e., a broadcast stream is delivered from the Content Provider to the Delivery Site];

relaying the data from the content provider to the client via the selected node [audio/video clips from a Delivery Site is played on a MPEG video player which has fast-forward/rewind functions, col. 14, lines 26-57; MPEG movies, when allowed, have a known duration when played on-demand and are already loaded on the client's computer, col. 14, line 58 to col. 15, line 12]; and

downgrading lower priority clients from a higher quality of service network link to a less optimal network link when a higher priority client requests use of the higher quality of service link.

Kenner et al. does not disclose downgrading the network link for lower priority clients when higher priority clients request the link. However, prioritizing clients and downgrading service links for low priority clients is well known in the art. For example, Jorgensen (USP 6,452,915) discloses prioritizing higher priority clients over lower priority clients and scheduling low priority traffic from a subscriber who has purchased premium SLA service agreement over high priority traffic from a subscriber who has a low cost SLA service priority [Fig. 9; col. 50,

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lines 15-46]. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the MSP 32 of Kenner et al. to include client prioritization for optimal network links in order to allocate available bandwidth based on subscriber priorities **[Jorgensen, col. 50, lines 30-34].**

Response to Arguments

6. Applicant's arguments filed on July 2, 2010, have been fully considered but they are not persuasive.

7. With respect to claim 63, Applicants state that Kenner et al. discloses trace routing and quality of service, but, argue, apparently, that such limitations are not the same as the limitations claimed by Applicants **[See Applicants' Amendment dated July 2, 2010, page 4, paragraph 5].** Applicants make similar arguments with respect to claim 64 **[See Applicants' Amendment dated July 2, 2010, page 4, paragraph 4].** The examiner respectfully disagrees.

8. As noted in the rejection of claim 63, Kenner et al. discloses Mirror Service Provider (MSP) 32 **[Fig. 1]** and Content Providers 22, 24/Delivery Sites 26, 28, 30 **[Fig. 1]** relay data to User Terminal 12 **[e.g., Fig. 1]** wherein smart mirroring includes traceroute, reverse traceroute, dynamic traceroute, and macroscopic network analysis **[col. 5, lines 20-25; col. 9, line 61 to col. 11, line 18; e.g., Fig. 1, between MSP 32 and client 12 as well as between any specified pair**

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of computers between MSP 32 and Client 12 (dynamic traceroute); MSP 32 provides management functions to distribution of Delivery Sites 26, 28, and 30 as well as allocation of requests to Content Providers 22, 24/Delivery Sites 26, 28, and 30, col. 7, lines 67; Delivery sites have the same content as Content Providers, col. 3, line 63 to col. 4, line 4; i.e., a broadcast stream is delivered from the Content Provider to the Delivery Site] wherein network performance is interpreted as mapping traceroutes between MSP 32 and Client 12 via Content Providers/Delivery Sites.

9. With respect to claim 63, Applicants also argue, apparently, that Kenner et al. fails to disclose downgrading the network link for lower priority clients when higher priority clients request the link [**See Applicants' Amendment dated July 2, 2010, page 4, paragraph 5 to page 5, paragraph 1**]. Applicants make similar arguments with respect to claim 64 [**See Applicants' Amendment dated July 2, 2010, page 4, paragraph 4**]. The examiner respectfully agrees. However, the examiner respectfully disagrees that such a limitation is not obvious in light of Jorgensen (USP 6,452,915).

10. For example, Kenner et al. does not disclose downgrading the network link for lower priority clients when higher priority clients request the link. However, prioritizing clients and downgrading service links for low priority clients is well known in the art. For example, Jorgensen (USP 6,452,915) discloses prioritizing higher priority clients over lower priority clients and scheduling low priority traffic from a subscriber who has purchased premium SLA service agreement over high priority traffic from a subscriber who has a low cost SLA service

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priority [Fig. 9; col. 50, lines 15-46]. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the MSP 32 of Kenner et al. to include client prioritization for optimal network links in order to allocate available bandwidth based on subscriber priorities [Jorgensen, col. 50, lines 30-34].

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

(a) Miernik et al. (USP 7,155,215), System and method for upgrading service class of a connection in a wireless network.

(b) Fijolek. et al. (USP 6,553,568), Methods and systems for service level agreement enforcement on a data-over cable system.

(c) Miernik et al. (USP 7,433,688), System and method for upgrading service class of a connection in a wireless network.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK A. MAIS whose telephone number is (571)272-3138. The examiner can normally be reached on 5am-4pm.

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13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pankaj Kumar can be reached on 571-272-3011. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 16, 2010

/MARK A. MAIS/

Examiner, Art Unit 2467

/Pankaj Kumar/

Supervisory Patent Examiner, Art Unit 2467